Water Plan Volume 1, draft 6/7/04
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Findings/recommended actions and chapter 1:

General observations:

1. The water quality recommendation(s) are weak. Has there been review and comment by DHS and the State and regional water boards on the question of what is most needed for better measurement and monitoring, source water protection, treatment, and correction of water quality from DHS and State Board? Also, address issues with funding "local" infrastructure such as facilities for collection and treatment of urban water and wastewater. Discuss potential use of financial assistance tools such as the SRFs for water quality and drinking water. (E.g., p. 7 #7.) *(Note: I can spend some time on this in next weeks.)*

2. Need to clarify the institutional/political arrangements (for example, often a group of districts/agencies acting collectively through JPAs, MOUs, special regional organizations) for "regional-level" planning and implementation of actions. To simply say "the region" "takes action" can be confusing. I've noticed that some readers are puzzled by reference on the one hand to the regions delineated in the SWP analyses and "regional" water management activities.

3. In some places the text lapses into the demand/ additional supply paradigm. I do not think we should represent the analytical process, objectives or performance simply in terms of quantities of water needed/demanded and produced. (See my comments on p. 4, #15.)

4. Some of the financing recommendations are vague or refer only to state bond funding solutions. (If I'm not mistaken, isn't this the thrust of the CA infrastructure plan?) While bond measures have their place, they are only one of a number of financing tools. Also, emphasis on statewide bonds skirts the beneficiaries pay principle, which establishes that in some cases specific user groups should be responsible for costs. The SWP should provide (or reference from other state documents) principles for state assistance, taking into account beneficiaries pay and tools for local and regional financing.

I'm particularly concerned that the investment categories emphasized in the state infrastructure plan (insofar as I can find a information on this) do not cover important types of local urban infrastructure (or, for that matter, many local levees, canals, etc.). Much of this infrastructure is "locally" financed (urban special district fees, e.g.); in too many cases "local" infrastructure investments which are needed to maintain, upgrade, or expand systems are deferred for lack of

fiscal ability. In the water quality arena, stricter regulatory requirements (urban storm water, for example) make local compliance difficult. (In the case of urban storm water, some requirements can be met with good land use design for new development-- i.e., passed on. On the other hand, it is harder to retrofit for older built-out areas. Downstream problems with water quality and flooding are familiar. So who's responsible and capable of responding?) Does the SWP have recommendations for these types of problems?

Specific text:

Findings and recommended actions. Page 1. Findings. Settings:

1. Frankly, I find this lead-off paragraph weak, and I even question the implication that the leadership is state/federal and that the regions/locals are merely following, as partners. Are we so confident that important innovation and leadership/example is not spawned locally? Revise, perhaps:

California water planning and management requires full and balanced consideration of the State's richly diverse people, environments, businesses, land uses, climates, geology, and variable hydrology.

~~Diverse and variable water uses are distributed throughout the State and over time, which do not coincide with natural water supplies.~~ The locations and timing of California's diverse water uses do not coincide with the State's natural water supplies. As a result of increased competition among water uses, management of California's water system has become increasingly challenging, complex, and at times contentious. ~~However, water issues are being resolved with leadership from the State and federal governments and partnerships with local and regional stakeholders.~~ Local, regional, State and federal governments and water suppliers each have a role in improving water supply reliability for the existing and future population and the environment. Water issues are being resolved through coalitions and partnerships among... *(list all players)....*

2. **Providing food and fiber crop products to Californians, as well as to other states and countries, consumes, and will continue to consume, more water than is consumed by all ~~other household~~ other (?) uses.**

(I'm not sure what the valid comparison is, but it's not "other household" uses.)

P.2. 6b. The first sentence lacks logic. Go back to the text from which this was extracted and revise. Maybe:

> Most agricultural water demands are met in average water years. However, even in average water years, some growers forego planting and other agricultural operations because they lack a firm water supply. Farmers over the past 25 years have learned to grow 50 percent more crops per acre-foot of applied water by improving productivity and efficiency. In some areas, water used

directly for agriculture has been reduced due to transfers to urban areas, environmental restoration, and groundwater replenishment.

P.4. 14, on *global climate change*. This is an example of a subject which could be hot linked to more information.

P. 4. 15. The finding reads: **Based on current trends, California's average-year water demand could increase between X.X million and X.X million acre-feet by 2030. This additional water would serve 14 million more Californians, sustain California's economy and agricultural industry, meet environmental**

restoration and water quality objectives, and eliminate groundwater overdraft.[2]

I don't see the logical connection between the "projected demand" and implied supply ("additional water"). However we represent the increased "demand," it's not exactly correct to suggest that these needs would be met by "additional water." There's only so much water in the system, climate change and cloud seeding notwithstanding. New diversions and new storage don't add water to the system: They redistribute it in time, location. Water quality changes can improve the utility of water– e.g., by expanding its use value. We need some new metrics to explain how we can expand and conserve the utility of our water resources (e.g., through better quality, management of distribution (time, space) and conservation). (For cross reference, see p. 6 #1: It's more successful in explaining the approach.)

P. 5. 16 versus p. 6 #2. #16 begins the informative discussion of how "regional" efforts can be assembled. On the other hand, p. 6 #2 talks about "regions" as if they have institutional reality, which is not the case. This text should refer to regional organizations, or groups of organizations making regional efforts.

P.8. 13. There's a disconnect between the lead statement, which refers to need for greater federal support and the "explanation," which discusses state activities. I suggest revising the lead sentence.

P 9 ff, Strategy Investment Options Table. I think the table is generally successful, does not need any more radical overhaul. A few suggestions:

* There is an explanation of Column 2, showing average annual amounts of water supply benefits. The following column 3 is "improve drought preparedness." Consider explaining (or guiding the reader to detailed text elsewhere) ways in which improving drought preparedness is measured or defined. It may not be obvious to readers why conveyance helps drought preparedness, but not water use efficiency.

* Although I'm trying to avoid quibbling with bullets, I do think there are some potentially significant applications of system reoperation for water quality improvements. (Consider real time operations on the San Joaquin system for salinity management, or operating for temperature.)

Specific text, Chapter 1:

p.6, bullet on "Regions." Again, this is text which refers to the region as if it were an institutional entity. How about language such as, "Through a regional plan, agencies acting together can..."

Paragraph 2: "The State recognizes the critical role that organizations (agencies), planning and acting regionally, must play in...."

Alternatively, provide a very clear definition of the term "region" as it is used in this text.

P.8, first bullet on infrastructure. Second paragraph of explanation references the Commission on Building for the 21st Century. Does this report really address financing mechanisms for local infrastructure outside of the prospect of additional state bonds? If it doesn't, I'm concerned (as stated earlier) that there's need to come to grips better with local infrastructure financing issues. Does the Commission's approach mesh with CALFED/BDA on user-supported financing?

p.9. Second bullet on equity. The issue is not just participation in programs and access to funds. Some programs have (or should have) special consideration for lower income areas through set asides, lower cost share requirements, etc..

P 10. Why is the vision/mission/goals and objectives text buried in the middle of this section? Shouldn't it go up front?

p. 11 #4b. For the record, I think the public trust reference in this objective is very weak ("consider" "whenever feasible"?). Didn't the PT group succeed in crafting a more affirmative commitment?

P. 12. I have a note that in Chapter 2, p. 6, there's a reference to performance measures. Where does work on such measures fit into Phase 2?

Box – Analytical changes (p. 7). Paragraph 2, refers to "In the interim, the narratives..." This suggests that sometime in the future (after the interim) there will be a return to the prior method (rather than retaining multiple scenarios and responses). Is this correct?

Box-- Analytical changes. Last paragraph. Reexamine that first sentence, beginning "Because shortages...." The logical connection between localized shortages and statewide estimates of potential supplies is off base. Are you trying to say that the supply benefit estimates are summarized at a statewide level, and thus do not necessarily reflect potential to address shortages within specific regions?

Box– Principles for IRP (p. 8). First two principles: What does "broad" mean? *Comprehensive? Inclusive? Generalized?*

Is there no principle related to public trust resources? (E.g., included in the second principle?)

Consider adding another corollary for principle #2: Avoid redirected impacts.

In a recent presentation on integrated regional water management planning, I credit John

Woodling with a good, practical principle: Aim for an implementable scale and scope of actions. Explanation: linking activities together in a plan is good, but linkages are a hazard if there's no reasonable assurance of implementation of the suite of interrelated actions.

Chapter 2:

p. 2. Last paragraph. I can't resist pointing out that San Joaquin County is expected to triple in population, not *size*.

Generally, be clear when you're discussing storage that both surface and ground are included (if indeed that is the intent).

P. 12. San Joaquin Region. You might mention that the water supply issues of the San Joaquin are linked to the Tulare Basin.

Water quality: There happens to be a significant issue with high selenium content of some agricultural drainage water, which has ecosystem impacts in this region and, potentially, the Delta.

P. 15. Trend from Statewide solutions to regional reliability. The first paragraph states that new large interbasin projects on the SWP/CVP scale are not "foreseeable in the near term..." I daresay they're not foreseeable. Are there any glimmers of plans out there? What does 2025 say?

p. 17: Watershed management: "The California Legislature has produced several ***regulations*** to improve water management and integrated planning at the local level." Regulations or statutes? See also Box – "Laws and Regulations Governing Water-~~related~~ Resources Management."

p. 18: Statewide and Interregional responses. Programs and planning:

CALFED discussion of objectives/secondary objectives is confusing. Maybe:

> The four primary objectives of the CALFED program ~~are the overall objectives for~~ relate to each of the key program areas of water quality, ecosystem quality, water supply, and vulnerability of Delta functions.....

P. 31. Releases of water for environmental uses. (Query: Is the fish and game code the sole basis for instream flows? What authorities does the State WRCB use in setting instream requirements?)